

Public Hearing Sign in Sheet

Proposed revisions to Rule 33CSR1 "Solid Waste Management Rule"

July 30, 2014, 6 p.m. Charleston

The Department of Environmental Protection asks for the information below so that agency staff may provide responses and information about decisions to you. The information you voluntarily provide on this sheet becomes part of the public record related to this topic and may be released if requested under the Freedom of Information Act.

Name (please print)	Address	Organization	Phone/Fax	E-mail	Comment Yes/No
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BEFORE THE DEPARTMENT OF ENVIRONMENTAL PROTECTION

IN RE:

**LEGISLATIVE RULE 33CSR1,
SOLID WASTE MANAGEMENT RULE**

ORIGINAL

HELD JULY 30, 2014

6:00 P.M.

*Donna H. Miller
Certified Court Reporter*

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A P P E A R A N C E S

ON BEHALF OF THE DEP:

THOMAS J. ALUISE
Public Information Specialist

DAVID JOHNSTON

P R O C E E D I N G S

1 MR. ALUISE: Good evening. I am Tom Aluise with
2 the Department of Environmental Protection's Public
3 Information Office, and I am the facilitator for tonight's
4 public hearing on proposal to revise Legislative Rule
5 33CSR1, "Solid Waste Management Rule."

6 The proposed revision establishes protocols
7 for the proper handling, management, and disposal of drill
8 cuttings and associated drilling process and establishes
9 limits for unique toxins associated with drill cuttings and
10 associated drilling mud and requires radiation and leachate
11 monitoring at all facilities receiving drill cuttings and
12 associated drilling mud.

13 The purpose of tonight's hearings is to give
14 you the opportunity to share your comments or information
15 with the DEP about the proposed revision to this rule.

16 Tonight's hearings are being recorded by a
17 court reporter so that the comments shared can be taken
18 into consideration and entered into the public record. An
19 agency response will be provided for all submitted comments
20 (both written and verbal).

21 To ensure that we successfully achieve the
22 purpose of this hearing, we ask that everyone be respectful
23 and considerate of each other by refraining from

1 interrupting others while they are speaking and also
2 keeping your comments on topic so that our time together
3 can be used efficiently.

4 To those wishing to speak, when you're
5 called to the front, please state your name and if you are
6 with any groups or organizations.

7 If you have written comments that you would
8 like to submit in addition to your spoken comments, please
9 hand them to me after you speak or at the conclusion of the
10 hearing.

11 We have three people who have signed up to
12 speak, and I'll check again at the end of the hearing if
13 anybody changes their mind and would like to speak, we will
14 certainly accommodate you.

15 Our first speaker is Mark Cochran.

16 MR. COCHRAN: Thank you. My name is Mark
17 Cochran. I'm from New Martinsville in Wetzel County. I am
18 a board member of the Wetzel County Solid Waste Authority.

19 In preparation for today's public comment
20 period, the Wetzel County Solid Waste Authority engaged two
21 environment consulting firms to prepare technical questions
22 and comments regarding these draft rules.

23 Downstream Strategies of Morgantown address
24 primarily water and air issues, and Bennett and Williams of

1 Columbus, Ohio address issues primarily concerned with
2 landfill design.

3 We are presenting you, the DEP, with the
4 results of the work of these two firms. They are in here
5 back to back, one in the front, one in the back. I believe
6 they are concise, yet comprehensive.

7 The Downstream Strategies takes me about 25
8 minutes to read. The Bennett and Williams takes me
9 slightly less.

10 There's two or three things here I would
11 like to speak to. These are rather voluminous so I don't
12 want to speak to everything, but both of these works speak
13 to something I think we should all be concerned about.

14 Because drilling waste is being deposited in
15 West Virginia landfills, and because this waste contains
16 heavy metals and radioactive materials in unknown
17 quantities, and because this drill waste contributes to
18 landfill leachate once it goes in the landfill, and because
19 landfill leachate is treated in conventional waste water
20 treatment facilities, which are not designed and not
21 capable of removing these heavy metals and radioactive
22 materials, and because waste water treatment facilities
23 discharge their effluent into the surface waters of the
24 state, we as a citizenry and a state are permitting the

1 lawful discharge of unknown quantities of heavy metals and
2 radioactive materials into the waters of the state.

3 we're doing that. I think that we really
4 need to consider the wisdom of that action. It's almost
5 stunning to me that we are doing that, as a citizenry and
6 as a state. Knowingly putting these materials into the
7 surface waters of the state.

8 A couple of other items I'd like to mention.
9 In the Downstream Strategies work, they talk about the
10 issue of minor modifications, minor permit modifications,
11 and major permit modifications.

12 what's happening right now with the disposal
13 of these drilling wastes is done under the auspices of
14 minor modifications. Would not a major permit modification
15 be appropriate for landfills that are now taking two or
16 three times the monthly intake that they took before
17 drilling waste. They have had their monthly intake
18 increase by a factor of two or three, and it's being done
19 under a minor modification.

20 In the Bennett and Williams work one thing
21 that popped out at me, Bennett and Williams raises
22 questions about the capability of leachate and liner
23 systems in these solid waste landfills.

24 These liner systems and leachate systems are

1 designed for landfills that are accepting municipal solid
2 waste. Now we are putting material in there that has a
3 density of two to three times that of municipal solid
4 waste.

5 Are these liners and these leachate
6 collection systems robust enough to handle this extra
7 weight? I urge you to review these two works. I thank you
8 for the opportunity to speak.

9 MR. ALUISE: Thank you. Our next speaker is
10 Bill Hughes.

11 MR. HUGHES: My name is Bill Hughes. I'm from
12 Wetzel County, Chairman of the Wetzel County Solid Waste
13 Authority. I've lived in Wetzel County for just a year or
14 so shy of 40 years. We bought our 79 acres there 40 years
15 ago, and the overarching motivator for my involvement of
16 many years has been that all my grandchildren, my two
17 children, all their children all live in Wetzel County, and
18 I think all of us anywhere we live share some concern for
19 what is West Virginia, the state we are living, going to be
20 like for our grandchildren and for their grandchildren. So
21 it's that real long point of view that motivates me.

22 Over the last summer through the winter and
23 fall I was here at the DEP offices a good bit. I was at
24 the Legislature a lot during the legislative session. I

1 actually was there too much. It's not a pleasant place to
2 visit and it's a media that I just don't operate well in, a
3 little messy the political process.

4 But one of the comments that came out there
5 and now then among some of the House of Delegates or the
6 State Senators as well, it's only Wetzel County that's
7 complaining about this.

8 I mean, why is no one else speaking up? I
9 mean this is -- well, that's a lot of observations.
10 There's some truth to that, and there's some omissions from
11 that.

12 The truth is there were not very many other
13 solid waste authorities, because across the state, the
14 Wetzel County Solid Waste Authority is the only one that
15 has in our file cabinets over 3,000 pages of leachate
16 reports. There's a bit of a problem when you start looking
17 at 3,000 pages of leachate reports. It takes a while too,
18 a little boring.

19 The other issue is seven years ago,
20 Chesapeake invaded Wetzel County. Massive footprint. Five
21 more drill rigs at the same time. Accidents galore.

22 Okay, so seven years ago, we were already
23 drilling holes in Wetzel County. In October, seven years
24 ago we had our first gas production. Well, it took four

1 years later for the DEP to say -- realize first and then
2 say maybe we ought to try to regulate this somewhat. The
3 emphasis being on somewhat.

4 So House Bill 401 was passed in December of
5 2011 that laid down some basic guidelines and some were
6 very fundamental, but it had a lot of rules about designing
7 a well pad, operating a well pad, water impoundments and
8 what to do. For example, one of them said okay, fellows.
9 we've got to have a professional engineering firm design
10 your well pads, because they are all slipping down the
11 hillside, creating a heck of a mess everywhere.

12 well, that's sort of like telling a trucker
13 you've got to keep air in your tires, in my opinion, but we
14 needed to do that. All right, that was just bare bones
15 regulations in 2011.

16 Then just a few months ago, the Legislature
17 finally figured out well, for seven years we have not
18 figured out what to do with drill waste, drill mud, drill
19 cuttings, the stuff that's left over.

20 They put solid, semi-solid, and for some
21 reason they thought, or in my opinion sometimes did not
22 think, let's just dump it in the landfills. So last year,
23 2011, the landfill that's in Wetzel County was allowed to
24 bury 250,000 tons of drill waste, uncharacterized, and by

1 that I mean, there's been a 20-plus year our DEP folks
2 could be very precise with, they have a waste
3 characterization process. Have a tanker truck spill diesel
4 fuel on the road after an accident, they've got 30,000 tons
5 of that or something like that. Okay, get a minor mod for
6 your landfill. Test it for TCLP metal, DROORO, and take it
7 to the landfill.

8 Well, we have completely subverted that
9 normal process for special waste, and not required the
10 drill cuttings from the horizontal bore to be tested. The
11 proposed regulations in the emergency rule that was just
12 put into effect a few weeks ago still does not do that.

13 So it's a problem. 300,000 tons went into
14 Meadow Fill, all total in the landfills between Brooke
15 County, Ohio County, Wetzel County and Wood County, 557,000
16 tons of drill waste between 2012 and 2013. I don't want to
17 look at this year's. These are depressing enough.

18 Because it's uncharacterized. I'm not
19 saying it's the worst stuff we are putting in the river.
20 Look at the Ohio River Watershed from Hancock and Brooke
21 County on down. We put a lot of nasty stuff in the river,
22 but we have had an NPDES process for decades. We know what
23 they are allowed to put in, what's in there, where SANKO
24 trolls the river frequent enough to test what's in there.

1 This is uncharacterized waste. We don't know what's in it.

2 The process flow that I gave, folks, now
3 some months ago has this bit of a flow chart. It would be
4 nice to have it on power point, but the flow is connecting
5 a drill path, any Marcellus drill path, with drinking
6 water. How do we get there? A there's a bunch of black
7 holes in the process.

8 Well pad, producing drill cuttings, get
9 taken to a landfill, moisture drains, percolates down
10 through the drill cuttings, becomes leachate. It's like
11 coffee coming out of the coffee grinds, I think.

12 The leachate invariably has been measuring
13 high gross beta, high gross alpha, Radium 226 and Radium
14 228, and no Strontium. It's been tested for that, and
15 other heavy metals.

16 So the radioactive constituents are showing
17 up, the isotopes are showing up, in the leachate coming
18 from the drilling cuttings because these are separate in
19 some landfills.

20 The radioactivity cannot be filtered out.
21 It passes right through any publicly owned treatment works.
22 I think there's some highly experimental, very expensive,
23 reverse osmosis processes, but anyway, our publicly owned
24 treatment works can't do it. Radium goes right through it.

1 So it can't be filtered out. The leachate
2 goes to the water treatment plant. The effluent from the
3 water treatment plants goes into surface waters, and that
4 as the Elk River and Freedom Industries proved sometimes
5 surface waters go into drinking water.

6 So that's the flow that I am concerned about
7 because a bunch of my friends and neighbors downstream
8 somewhere.

9 So those are the issues that this report
10 that Mark Cochran handed in, we have a few more copies for
11 those who might wish to be a little bit more informed.
12 When we look through the consultants available, we could
13 find folks who knew how to design landfills and mediate
14 landfills, you know. We could find some who were good on
15 water analysis and NPDES and good water chemistry folks,
16 but to tell you the truth, we couldn't find any one firm
17 that could do what we wanted, which is why we had them
18 both, and we couldn't find anyone that -- anyone, anywhere,
19 that had experience doing what we are doing.

20 Since we started creating nuclear waste in
21 the early '40s or '50s, and I don't know when it would have
22 started, we as a nation, we as a collection of states, have
23 never tried to do this. This is uncharted territory. This
24 is new ground. This is unmapped. We are literally

1 guessing in the dark, and we hope that it's not going to be
2 a glowing dark.

3 The point is, this is low level radioactive
4 waste. I'm not saying this is enriched plutonium. This is
5 not going to blow up. I know over the years, we'll
6 probably burn a couple -- the smoke detectors. They have a
7 little ionization unit in them. You are not supposed to
8 put them in landfills. I know it's happened.

9 The issue is we have had small amounts of
10 medical waste, small amounts of other low level radioactive
11 waste, and it hasn't been a problem. But if you take small
12 times gargantuan, you end up with huge or something like
13 that.

14 600,000 tons of this stuff in a year or so,
15 all of it low level radioactive can become a serious issue.
16 The radon gas is being put off all the time, because Radon
17 226, Radium 226 is radon gas. That's going to be generated
18 constantly. It only has a half-life of four days, three to
19 four days. It's not a problem, but the Radium 226 has a
20 half-life of 1,600 years. That's going to probably outlast
21 us.

22 We are doing things that are really
23 unexamined, unexplored.

24 I'm just going to read the last paragraph or

1 so out of this cover letter that we have signed, all five
2 of us in the Wetzel County Solid Waste Authority signed it.
3 It's inside the document that was handed in.

4 This is a large experiment into uncharted
5 territory, without any template or models or maps to help
6 us make prudent choices with regard to the long term
7 environmental and public health implications.

8 This is a leading edge problem of our own
9 making. We need to proceed with the utmost prudence. Some
10 of our decisions might be irreversible. The chemical laws
11 of nature, the rules of nuclear physics, and the permanent
12 human need for clean, potable water will not be altered,
13 whether we act in uninformed haste or with prudent and
14 reasoned deliberations.

15 Just having good intentions, when combined
16 with our temporary ignorance of the natural laws will not
17 be tolerated by nature or forgiven by many generations to
18 come. Mother Nature will have the final say.

19 And that's all from Wetzel County at the
20 moment.

21 MR. ALUISE: Thank you. Our next speaker is
22 Angie Rosser.

23 MS. ROSSER: Good evening. I'm Angie Rosser,
24 the Executive Director of the West Virginia Rivers

1 Coalition. The shale gas drilling boom in West Virginia
2 has presented the state with a hefty challenge of balancing
3 the economic opportunities of gas development with the
4 protection of the natural environment and its land, air and
5 water resources we rely on to survive.

6 One of the most challenging aspects
7 accompanying the recent surge of unconventional gas
8 drilling is managing the massive volume of waste generated
9 from these operations.

10 Not only is there simply a lot of it to deal
11 with, but we know the waste includes heavy metals and
12 radiological elements that pose a risk to human health.

13 The volume of waste is only expected to
14 increase in coming years. As of this spring, West Virginia
15 has around 2,300 Marcellus well, and the U. S. Department
16 of Energy projects that we will see upwards of a pace of
17 900 Marcellus wells per year by 2020.

18 Management of drilling waste in West
19 Virginia is one of our most serious and significant
20 environmental issues of our time, and we need to be very
21 thoughtful and cautious.

22 For the West Virginia Rivers Coalition we
23 focus our concerns on how drilling waste management
24 handling and disposal practices pose a potential threat to

1 water quality. A leading concern is that there is simply
2 many unknowns in the characterization of the drilling waste
3 and the effectiveness of leachate treatment prior to its
4 discharge into a receiving stream.

5 It is known that naturally occurring
6 radioactive materials, such as Radium 226, is found in
7 drilling waste and is water soluble. It is in a leachate
8 that leaves landfills accepting the waste, gets treated and
9 then it's discharged into the receiving stream.

10 For the Wetzel County Sanitary Landfill that
11 receiving stream is the Ohio River, which is the drinking
12 water source for over five million people.

13 The key concern to this is that we just
14 don't know enough about the effectiveness of treatment.
15 We don't know all of the pollutants they are adding to the
16 receiving streams and rivers and how what we are adding
17 impacts the overall pollutant carrying capacity of
18 receiving waters over time.

19 These practices are in essence an experiment
20 and the rivers and the people of West Virginia are the
21 subjects of this experiment.

22 The lead author of a 2013 DEP-sanctioned
23 study concluded, "At present little is known about the
24 risks associated with the solid waste from hydraulic

1 fracturing in the Marcellus. Characterization of their
2 inorganic, organic and radioactive contaminants is at
3 present incomplete. A systematic study, including worker,
4 environmental and community risks is needed.”

5 Ideally, we would have liked to have seen an
6 investment into such systematic studies before subjecting
7 the public to this experiment in drilling waste management,
8 but it's seemingly too late for that.

9 The DEP and the Legislature are moving us
10 ahead in this experiment.

11 The solid waste rule needs to take every
12 measure to make sure this is not an experiment gone wrong.
13 Just the mere mention of the letters MCHM quickly remind us
14 of how terribly things can go wrong when there are unknowns
15 about contaminants that can or are entering our water
16 supplies.

17 At this point, DEP must make every assurance
18 in these rules that the best technology be used in
19 monitoring and that monitoring includes a complete set of
20 parameters, particularly at the point of discharge into
21 surface waters.

22 We cannot cut corners when it comes to
23 protecting our water and our health. We cannot look to
24 quick fixes that suit the gas industry's needs without

1 thinking about long term accumulative health and
2 environmental impacts.

3 Today I was reviewing comments submitted on
4 this rule from Professor James O'Reilly with the University
5 of Cincinnati's College of Medicine. He is the author of
6 multiple textbooks dealing with solid waste management, and
7 this excerpt from his comments reveals for me insight into
8 some of the dynamics of how we must weigh economic burdens
9 on industry and public health.

10 In his comments dated July 29th, 2014, he
11 urges DEP to, "squarely face the claims of economic burden
12 and please reject them. Use the best technology now, not
13 later. Use the safest course of landfill monitoring, not
14 the cheapest. I urge the DEP to reject claims that an
15 increase in radioactive leachate and effluent from
16 landfills is to be accepted as a desirable tradeoff for
17 claims of more short term employment and transient jobs. I
18 urge the DEP to protect the environment as its very name
19 suggests even though LLC drilling companies, which are
20 reportedly funded by the state oil companies of Norway,
21 China and France would prefer not to spend any money to
22 protect people in West Virginia. Let the bright minds of
23 Wall Street and London shale gas investors come up with a
24 well-head centered means of dealing responsibly with the

1 disposal of contaminants they dig up with the drill waste
2 radioactivity. The drillers LLCs will be long gone by the
3 time that an increase in human bone concentration levels of
4 strontium or radium among West Virginia children is
5 precisely known. The irony is that economic arguments are
6 being made by companies which are legally designed to
7 dissolve under corporation law, while the by-product of
8 their drilling will not dissolve its radiant content for
9 many thousands of years.”

10 It's time to expect more of industry to come
11 up with long term sustainable solutions that are proven to
12 be environmentally sound and protective of human health.

13 As I said earlier, this problem will not go
14 away. In fact, it will only get worse.

15 Our request is that the DEP, the
16 Legislature, and drilling companies operating in this state
17 will put West Virginia forward as a national model for
18 innovative technology and practices that reduce toxic waste
19 in the first place, and plan prudently for long term safe
20 management.

21 House Bill 107 and these rules do not get us
22 to that place, and I am very concerned about our state's
23 handling of this issue, again one of the most significant
24 environmental issues of our day.

1 In the meantime, until we get to that place,
2 we need to be expanding our thinking about how to solve
3 this problem long term.

4 West Virginia Rivers Coalition supports the
5 technical comments and questions submitted by the Wetzel
6 County Solid Waste Authority and Professor James O'Reilly.
7 We will be paying close attention to the requirement in
8 House Bill 107 through DEP to conduct an investigation and
9 submit a report to the Legislature that examines hazardous
10 characteristics of leachate collected at facilities
11 receiving the drilling waste, and its potential negative
12 impacts on surface and ground water resources.

13 This rule must be revised to ensure that DEP
14 is able to conduct a thorough and accurate evaluation
15 pursuant to this requirement.

16 Thank you for your attention.

17 MR. ALUISE: Thank you. Our next speaker is Tom
18 Rhule.

19 MR. RHULE: My name is Tom Rhule, and I am a
20 lifelong resident of West Virginia. In the interest of
21 full disclosure, I'm the Communication Director for the
22 West Virginia Mountain Party, although I believe the
23 factual statements I make here today, are apolitical and
24 are necessary to protect the public health, safety and

1 welfare of the citizens of this state as guaranteed by the
2 West Virginia Constitution's Bill of Rights.

3 Thank you to the Agency for allowing me to
4 speak. I wish to request leave to revise and extend our
5 remarks as I don't believe that I will be allowed to finish
6 here because of the wanton cover up of the radiation
7 problem associated with the Marcellus waste by the West
8 Virginia DEP.

9 Randy Huffman's original landfill memorandum
10 of July 2013 was issued quietly and without public comment
11 because he knew it was wrong to do so. The way I see it,
12 the DEP owes us all an opportunity to speak twice as long
13 because of his attempt to keep concerned members of the
14 public from revealing just how dangerous that memo was.

15 In May of 2011, West Virginia DEP officials
16 are on record as having assured the West Virginia
17 Legislature that radiation is a nonissue with regards to
18 drilling the Marcellus. Associated Press' Lawrence Messina
19 reported that, "DEP Secretary Randy Huffman said the
20 geology of West Virginia's share of the massive rock
21 formation a mile underground may make radiation less of a
22 concern than in neighboring Pennsylvania where officials
23 have been more actively testing."

24 "The radioactivity levels are really related

1 more to the location, to the depth and pressures," Huffman
2 told the Joint Committee on Government Organization.

3 James Martin, head of DEP's Office of Oil
4 and Gas, noted that his agency has only just started to
5 craft a process for testing and has yet to decide whether
6 to assign the task to its own staff or to industry."

7 Now, that's wrong. You need to make note of
8 what James Martin said. Its own staff or to industry.

9 when I read that in the Charleston Gazette,
10 I immediately called Eastern headquarters for the United
11 States Geological Survey to find out if the threat of
12 radiation in West Virginia was any less than in
13 Pennsylvania.

14 They put me in touch with Liz Rowan, lead
15 scientist of the 2011 U. S. Geological Survey Scientific
16 Investigations Report 5135 titled Radium Content of Oil and
17 Gas Field Produced Waters in the Northern Appalachian
18 Basin.

19 Because she assured me during that phone
20 conversation that the threat of radiation would naturally
21 not stop at West Virginia's borders, as Huffman and Martin
22 had testified, I since have found documents that they both
23 knew, or should have known, that their testimony was false
24 and misleading.

1 That USGS study is but one of many revealing
2 that it's not the geology or the depth that is an indicator
3 of high radiation as Huffman stated, but the amount of gas
4 that's trapped. It has also been found that the higher the
5 conductivity of the flow back, the more the Marcellus share
6 in that area will have a higher uranium content, and is
7 also an indicator that more gas will be produced.

8 In other words, high conductivity, more gas,
9 more radiation. Read Rowan's report. You'll see.

10 Because of that evidence, I strongly believe
11 that they both should immediately be relieved from duty and
12 charged with malfeasance. At the very best, state house
13 leaders should censure the West Virginia DEP over their
14 misinformation, particularly when it comes to any oil and
15 gas industry reports or recommendations.

16 For example, Safe Drinking Water Act here in
17 West Virginia reports required annually by the EPA reveal
18 that toxic amounts of radiation have been suddenly showing
19 up in small public service districts only since the new
20 high pressure horizontal hydrofracking of the Marcellus
21 began in 2008. This is when they showed up in 2008. Bill
22 Hughes just said it's been around since 2007. There's a
23 little time line correlation we need to be aware of going
24 on here. This is not all.

1 Neither the DHHR or the DEP have ever
2 revealed the source of that radiation. They've also never
3 informed the public that the public has been exposed to it.
4 I have documented evidence leading to the strong belief
5 that dumping Marcellus waste is the source of toxic
6 radiation in at least 17 of West Virginia's small public
7 service districts.

8 Unfortunately, it is too detailed to go into
9 at this forum, but I alerted the WV DEP of it through their
10 Public Advocates Department and discussed it in detail
11 several months ago with them when I discovered it.

12 According to the DEP's final report entitled
13 Water Quality Literature Review and Field Monitoring of
14 Active Shale Gas Wells Phase I dated February 15, 2013,
15 "All Marcellus flow back samples exceeded drinking water
16 standards for barium, chloride, iron, manganese, total
17 dissolved solids and Radium 226." That's every sample.

18 It was buried. Buried deep in that report.
19 Every sample had toxic amounts of Radium 226 in them.

20 First of all, despite other misleading
21 statements in that document, Radium 226 is not naturally
22 contained in the Marcellus in toxic amounts. According to
23 the USGS, radium is produced in toxic amounts as a by-
24 product of the high amount of uranium only because it is

1 being liberated and brought to the surface by drilling.

2 The problem with the DEP's definition is
3 that when it is liberated and brought to the surface, it is
4 no longer naturally occurring radioactive material or NORM.
5 I have to tell you, that is an oil and gas industry, NORM.

6 And its propaganda agents at the DEP call it
7 NORM, but it is actually technologically enhanced naturally
8 occurring radioactive material or TENORM.

9 It is quite troubling that a document of
10 such importance as the DEP's Phase I report only provides a
11 casual definition of the TENORM because TENORM is, in fact,
12 a legal term of art, and it is defined in West Virginia
13 Code.

14 West Virginia State Code, §64-23-16, or
15 64CSR23, is properly titled Radiation Safety Requirements
16 for Technologically Enhanced Radioactive Materials
17 (TENORM).

18 Section 16.1 states the purpose of the
19 title, "This section establishes radiation protection
20 standards for the possession, use, transfer, and disposal
21 of technologically enhanced naturally occurring radioactive
22 materials (TENORM)."

23 Basically, if you read the whole thing, it
24 puts the onus on DHHR and not DEP to protect us against

1 this radioactive waste. That's why DEP has buried TENORM,
2 the term. So we have to get the terms right.

3 When uranium-bearing drill cuttings are
4 unnaturally brought to the surface by drillers, they are by
5 the State of West Virginia's own legal definition, TENORM.

6 Instead of following the State's TENORM law,
7 the West Virginia DEP has reportedly dispatched an agent
8 from its Homeland Security Division to falsely assure
9 landfill operators and the general public that dumping
10 these cuttings is safe, see Wheeling -- the Wheeling
11 Intelligencer/Wheeling News Register, April 3rd, 2014,
12 titled "Drill Cuttings Being Tested for Radiation."

13 When I contacted the Consumer Advocates
14 Division at the West Virginia DEP to find out the Homeland
15 Security agent's test procedures and lab results, I was
16 told that I would have to try to get that info through a
17 Freedom of Information Act request.

18 The amount they wanted to charge was
19 inordinately high, and they refused to waive that fee
20 giving no reason for doing so, even though I stated a
21 public need to know and that I would not personally profit
22 from it other than possibly saving fellow citizen's lives.

23 When I called the DHHR's acting chief of
24 Radiation, Toxics and Indoor Air Division, that's DHHR's

1 top man, he was acting, though. He's only an acting chief,
2 they haven't had a chief of radiation since Joe Manchin was
3 Governor.

4 But I asked him directly if he was aware of
5 the TENORM laws that applies to the Marcellus, he said that
6 he had discussed it with DEP's officials, but they were not
7 working together with him or anyone at DHHR in any capacity
8 to comply with that law.

9 Through the media, the DEP has been assuring
10 the public that there is no way that drill cutting waste
11 can make it into people's drinking water. However,
12 possibly because the DEP doesn't have the expertise to
13 fully understand all the dangers to public health that
14 Radium 226 TENORM poses, the DEP has not secured proper
15 bonding from landfill operators to cover the problems from
16 leaks 1,600 years from now, which is the approximate half-
17 life of Radium 226. Nor can it assure the public that the
18 container designs will hold up that long, or that those
19 landfills will be secure in any way.

20 Radium 226 easily travels up the food chain,
21 and is known to cause cancer. So any drilling waste
22 material not properly secured for at least 1,600 years into
23 the future poses a major threat to the public health.

24 The DEP has long known that water passing

1 through the Marcellus releases toxic amounts of Radium 226
2 and that it is TENORM that should be dealt with by health
3 professionals, not some dude with a Homeland Security title
4 and a Geiger counter.

5 The evidence of that may be found in its May
6 9, 2011 Consent Order Number 7003 issued to the City of
7 Wheeling from the DEP wherein the DEP properly used the
8 term TENORM as it relates to Marcellus waste primarily
9 because of the toxic amount of radiation tested in samples
10 taken from hauling trucks parked outside the Wheeling
11 Municipal Waste Treatment facility waiting for their loads
12 of radium-laced brine to be run through it.

13 The City of Wheeling was fined originally
14 something like \$400,000 for noncompliance. I think it was
15 eventually dropped to \$49,000 when they came into
16 compliance. But that Consent Order, they have it on file
17 here.

18 Anyway, and it shows that DEP knows what
19 TENORM is, knows where it comes from, and how dangerous it
20 is.

21 Anyone with a lick of sense ought to know
22 that if water that's run through bore holes picks up
23 radiation, then the cuttings that made those bore holes
24 just has to be rife with it.

1 It also stands to reason that any storm
2 water running through those landfill cuttings will carry
3 Radium 226 TENORM for at least 1,600 years.

4 what I'd like to know is why neither the DEP
5 nor the DHHR is properly dealing with toxic amounts of
6 radiation that's been showing up in public drinking water,
7 but instead have been covering it up. Are they now going
8 to dispatch some homeland security dude with a Geiger
9 counter to those public service districts to falsely claim
10 that there's nothing to that problem as well?

11 And I have my notes of which public service
12 districts they are. So if anybody wants to see them, I'm
13 going to make them available through a press release on
14 line.

15 Thank you.

16 MR. ALUISE: Thank you. Is there anybody else
17 who would like to speak before we conclude the hearing?

18 This concludes the public hearing on the
19 proposed revision to Legislative Rule 33CSR1, "Solid Waste
20 Management Rule." The agency will review all comments and
21 take them into consideration as it moves forward with
22 finalizing the Agency Approved Rule.

23 Thank you very much.

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CONCLUDED AT 6:45 P.M.

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REPORTER'S CERTIFICATE

STATE OF WEST VIRGINIA,
COUNTY OF KANAWHA, to wit:

I, Donna H. Miller, Notary Public in and for the State of West Virginia, duly commissioned and qualified, do hereby certify that the foregoing was duly taken by and before me, under the West Virginia Rules of Civil Procedure, at the time and place and for the purpose specified in the caption thereof.

I do certify that the said hearing was correctly taken by me by means of the Stenomask; that the same was transcribed by me, and that the said transcript is a true record of proceedings had.

I further certify that I am not connected by blood or marriage with any of the parties to this action, am not a relative or employee or attorney or counsel of any of the parties, nor am I a relative or employee of such attorney or counsel, or financially interested in the action, or interested, directly or indirectly, in the matter in controversy.

Given under my hand this 31st day of
July, 2014.

Donna H Miller
Donna H. Miller
Notary Public

My commission expires October 1, 2023.

